WHAT IS CLAIMED IS:

1. A cyclone vacuum cleaner comprising:

a main body;

a flexible hose assembly extending from the main body;

an operation handle connected by one end to the flexible hose assembly, and the other end to an extension pipe to be joined with a brush which is in contact with an area to be cleaned;

a cyclone dust collector disposed between the main body and the operation handle to collect dust; and

a brush connected to the operation handle draw in the dust on the area to be cleaned.

2. The cyclone vacuum cleaner of claim 1, wherein the cyclone dust collector is disposed between the operation handle and the flexible hose assembly.

3. The cyclone vacuum cleaner of claim 1, wherein the flexible hose assembly comprises a first flexible hose to be connected to the operation handle and a second flexible hose to be connected to the main body, and the cyclone dust collector is

disposed between the first and second flexible hoses.

4. The cyclone vacuum cleaner of claim 1, wherein the cyclone dust collector further comprises:

a cyclone body for generating an air whirlpool current with respect to air flowing in, comprising an air inlet fluidly communicating with the operation handle, and an air outlet fluidly communicating with the main body;

a dust receptacle removably connected to the cyclone body by a locking unit;

a first upstream prevention member integrally formed with the dust receptacle;

a dust separation grill which is downwardly extending from the air outlet in the cyclone body, having a plurality of fine holes in a surface thereof; and

a second upstream prevention member formed at the lower part of the dust separation grill removed from the air outlet.

5. The cyclone vacuum cleaner of claim 4, wherein the locking unit further comprises:

a hinge projection formed on the operation handle; and

a hinge hole formed in the dust receptacle corresponding to the hinge projection.

6. The cyclone vacuum cleaner of claim 5, wherein the dust receptacle has a connecting end formed in the shape of an arc of an imaginary circle having a locus at the hinge projection.

7. A cyclone vacuum cleaner comprising:

a main body;

a flexible hose assembly at one end to be connected to and extending from the main body;

an operation handle connected to the main body through at another end of the flexible hose assembly, the operation handle connected to an extension pipe for use with a brush which is intended for contact with an area to be cleaned;

a cyclone dust collector connected to the flexible hose assembly and to the main body; and

a brush connected to the operation handle for drawing in dust located on the area to be cleaned.

8. The cyclone vacuum cleaner of claim 7, wherein the cyclone dust collector further comprises:

a cyclone body comprising an air inlet fluidly communicating with flexible hose assembly, and an air outlet fluidly communicating with the main body, the cyclone body being shaped and configured so as to be capable of generating an air whirlpool current with respect to air flowing into the cyclone body;

a dust receptacle removably connected with the cyclone body for collecting the dust separated from the air whirlpool;

a first upstream prevention member integrally formed with the dust receptacle;

a dust separation grill extending downwardly from the air outlet in the cyclone body, and having a plurality of fine holes formed in a surface thereof; and

a second upstream prevention member formed at the lower part of the dust separation grill removed from the air outlet.

9. The cyclone vacuum cleaner of claim 8, wherein the air inlet of the cyclone dust collector is oriented in a coaxial direction relative to the air outlet.

10. The cyclone vacuum cleaner of claim 8, wherein the air inlet of the cyclone dust collector is oriented in a non-coaxial direction relative to the air outlet.

11. The cyclone vacuum cleaner of claim 10, wherein the air path between the air inlet and the air outlet is skewed.